





STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
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MEMORANDUM

TO: All Users of the Delaware Manual on Uniform Traffic Control Devices

VIA: Don Weber, P.E. 
Chief Traffic Engineer

FROM: Adam Weiser, P.E., PTOE 
Safety Programs Manager

DATE: March 19, 2012

SUBJECT: Temporary Traffic Control within Intersections

Construction operations within intersections require the deployment of complex temporary traffic control measures. The purpose of this memorandum is to provide guidance on how to use certified flaggers and uniformed law enforcement personnel during construction and maintenance operations when those operations affect the operation of the traffic control devices, such as traffic signals, stop signs and yield signs present at the intersection.

The provisions in this memorandum apply only to planned construction and maintenance operations. This memorandum does not apply to traffic control at incident or emergency scenes, however it is expected that for long duration incidents, the initial response and traffic control be modified for the scale of the event, including the possibility of implementing these procedures.

Authority of Certified Flaggers and Uniformed Law Enforcement

Delaware Code authorizes police officers, authorized flaggers, fire police officers and uniformed adult school crossing guards to control or regulate vehicle and pedestrian traffic on public roads¹. These persons may also override traffic control devices at intersections². While certified flaggers and uniformed law enforcement officials have the legal authority to override traffic control devices, this practice may not provide the safest method of controlling traffic during non-emergency construction or maintenance work operations within an intersection. In an effort to maintain the safest possible work zones on Delaware roadways, the following paragraphs prescribe methods to control traffic in intersections when work zone activities must interrupt the normal function of the existing traffic control devices within those intersections.

¹ See 21 Del. Code §4103(a).

² See 21 Del. Code §4107(a).

Work within Intersections

When work is performed within an intersection that creates the need for flaggers and/or police officers to override the existing traffic control devices, the following guidance shall apply. First, a minimum of one flagger for each intersection approach shall be provided and these flaggers shall be stationed a minimum of 50 feet upstream of the stop line. An additional flagger may be provided at the intersection and be designated as the Primary Flagger. If used, the Primary Flagger shall control the flow of traffic through the intersection by directing the actions of the other flaggers.

Second, traffic officers shall be present at signalized intersections whenever the functionality of the signal is affected. The traffic officer's responsibility shall include the following:

1. The traffic officer shall place the traffic signal in flash mode. The officer shall remain on location as long as the traffic signal is in flash mode. At no time shall the traffic officer leave the location and relinquish control to the flaggers.
2. The traffic officer shall direct traffic through the intersection.
3. The traffic officer shall coordinate directly with the Primary Flagger who will relay information between the traffic officer and the approach flaggers.
4. The traffic officer shall place the traffic signal in normal mode once the operation is complete and the temporary traffic control devices are clear of the roadway.

The flagging operation shall be operated to provide the minimal practicable delay for all approaches to the intersection. Approach flaggers are required to monitor the length of the queue for which they are responsible and to relay that information to the Primary Flagger so the Primary Flagger can efficiently control the traffic. On multilane roadways, one flagger shall not control more than one lane of traffic. Flaggers should not be placed between two or more open lanes and should have a designated escape route.

In order to simplify the operation and to increase safety, the following options should be considered:

1. Closing exclusive turn lanes within the intersection and detouring turning traffic to other routes.
2. Temporarily converting side street approaches to right-in/right-out movements and detouring turning traffic to the next available U-Turn on the mainline roadway.
3. Closing the intersection to traffic.
4. Performing work during off-peak hours.

On intersecting roadways with ADTs of more than 2,000 trips per day, the Engineer and/or Contractor shall coordinate with DelDOT's Traffic Safety Section prior to closing through lanes and/or exclusive turn lanes with a 5-day notice if provisions to do these closures have not been provided in the Contract Documents. If approved detour plans have not been provided, the Engineer and/or Contractor must obtain permission from DelDOT's Traffic Safety Section prior to detouring traffic or closing intersections and this coordination shall occur at least 2 weeks prior to the implementation of the closures.

In all cases, the Transportation Management Center (TMC) shall be notified when any intersection is put under flagger control or a traffic signal is placed in flash mode. The TMC shall also be notified when a signal is returned to normal operation. The project inspector is responsible for making this notification. If an inspector is not present, the police officer shall notify the TMC. The phone number for the TMC is (302) 659-4600.

Work within Close Proximity to a Signalized Intersection

Work within intersections may cause traffic congestion that affects the proper functioning of additional intersections. When the work causes traffic to queue through adjacent signalized intersections, the following steps should be implemented:

1. Flaggers should be placed at each affected signalized intersection within the work zone. The flagger stations shall be placed in advance of the traffic signal.
2. When the queue reaches the affected intersection, the flaggers shall stop traffic in advance of the signal in such a way that keeps traffic from stacking through the intersection and blocking cross traffic when the signal becomes red.
3. When sufficient downstream storage becomes available, the flaggers shall release traffic through the intersection.
4. Flaggers shall remain present and repeat this procedure throughout the workday or until the nature of the work activity changes so that queuing is minimized.
5. Law enforcement personnel may be used in lieu of flaggers for this procedure.

All flagging operations on Delaware roadways shall comply with Section 6E of the Delaware MUTCD. For further questions regarding this information, please contact the Traffic Safety Section at (302) 659-4060.